

## A Priceless Collection

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The impressive Rocky Mountain (RM) Herbarium at the University of Wyoming contains the largest collection of Rocky Mountain plants and fungi in existence. It ranks 17<sup>th</sup> in the nation, housing about 850,000 specimens and is the largest facility of its kind in the Rocky Mountain region. Ronald L Hartman, curator of the RM Herbarium, said it was founded by Aven Nelson in 1893. Nearly 100 years following the establishment of the RM Herbarium, it received an honorary addition to its already extensive inventory. In 1982 the entire sought-after U.S. Forest Service (USFS) National Herbarium was added to the already prominent RM Herbarium. Seventy-five steel cases weighing 20 tons and filled with an estimated 130,000 specimens found a new home at the University of Wyoming. The USFS National Herbarium was founded in 1910 by the noted forest ecologist, the late William A. Dayton. It was originally held in Washington, D.C. but was transferred in 1970 to the USFS Rocky Mountain Forest and Range Experiment Station on the Colorado State University campus. The collection remains on indefinite loan to the University of Wyoming and is rich in material from national forests throughout the country. "The USFS National Herbarium represents the efforts of hundreds of Forest Service employees over many decades," explained Hartman. Each specimen has a seal indicating ownership and they are intercalated with those of the RM Herbarium. The USFS desired the collection to remain in the west where it would be most used and useful. The low humidity and freedom from insects at the University are definite assets in the preservation of all the RM Herbarium holdings.

Page upon page of old newspaper issues are securely bundled together in a side room of the RM Herbarium at the University of Wyoming. Inside every spread is a single pressed and dried plant specimen collected this summer. Each specimen holds imperative information on plant diversity in the Rocky Mountain Region and belongs to one of the many ongoing Rocky Mountain Herbarium floristic studies. Most floristic studies are



First specimen accessioned into the Rocky Mountain Herbarium, indicated by the seal seen on the bottom left. This specimen was collected in 1893.

undertaken by graduate students and focus primarily on plant diversity with an emphasis on documenting species of conservation concern as well as noxious weeds. One sheet of each specimen collected will permanently join the already extensive inventory at the RM Herbarium for future reference and use.

All herbarium specimens are pressed flat, dried and preserved in folders along with pertinent information including scientific name, date, habitat description, and location of collection. They are stored in sealed steel cases and used extensively by future graduate students researching allied areas. The specimens are often displayed as teaching material for undergraduate courses and assist in identifying or verifying plants collected by lay or professional communities in the region and elsewhere. Specimens in the inventory date back as far as 1811, and astonishingly maintain vibrant color. When compared to newer specimens of the same species, both remarkably demonstrate their original hue despite huge gaps in collection dates.



With assistance from numerous graduate students, the RM Herbarium has conducted 59 intensive inventories mostly in Colorado, New Mexico, and Wyoming with the goal of producing a critical flora of the entire Rocky Mountain region. Nearly 700,000 vascular plant specimen records from the Rocky Mountains and western North America can be accessed on the RM Herbarium's Specimen Database (<http://www.rmh.uwyo.edu>). The database can be searched by a variety of text criteria or by selecting a geographic region on a map. Results are displayed on an interactive map and data is downloadable for use with numerous applications.

Tucked between the recycled newspapers in the side room of the RM Herbarium, each new specimen anticipates being revisited by researchers in hopes to eventually find a permanent home in the herbarium's inventory or even be featured on the RM Herbarium's Database. "With time, the value of each specimen increases due to climate changes," says Hartman. All preserved specimens, including the USFS National Herbarium holdings, continue becoming invaluable and yet remain available for education, research, and public service in the RM Herbarium at the University of Wyoming.

Ronald Hartman, curator of the Rocky Mountain Herbarium, carries a specimen from the steel cabinet where it is stored.